

General Information for Observing Sessions

The observing sessions will take place at a dark sky site, the Glenlea Astronomical Observatory (GAO) located at the Glenlea Research Station approximately 20 km south of the university.

The observations will be made outside in open fields with no warm shelter or washroom facilities. Plan accordingly bring **warm** clothes. Sitting outside for a few hours gets colder than you would suspect.

Bus transportation will be provided. Seats on the bus are on a first come, first served basis. Seating capacity is around 40. Buses depart from and return to parking lot B by University College. Departure time of buses will be 7:30 pm sharp. The buses will return to campus at around 10:30 pm.

There will be one observing night for each of Monday, Tuesday, Wednesday, and Thursday and they will occur when weather permits. Once a Monday observing session takes place, no other Mondays will be offered again. Students **MUST** attend one of these 4 possible observation sessions. It is the student's responsibility to keep track of when observing sessions are to be held and to attend them. There will be no makeup of missed observing sessions.

Observing sessions will be announced in three ways:

1. An announcement will be posted on the astronomy website:
http://www.physics.umanitoba.ca/astro/?page_id=125
2. An email will be sent to the class list at about 5:00 pm. It is the student's responsibility to check their email on potential observing days.
3. It will be posted on the course page for UM Learn

Log Book:

Students are required to keep notes and record observing assignment responses in an observation logbook. The logbook will consist of notes kept in a duotang or other bound book. Loose leaf sheets are not acceptable and assignments turned in on loose leaf sheets will not be graded.

Required Supplies for observing Sessions

1. Warm clothes: Dress for the observing sessions with clothing much warmer than you think you will need. Wear boots since the observing area is just open grassy fields. The need for warm clothing cannot be overemphasized. You will be standing outside without moving around much for a couple of hours. Dress like you are going to the arctic. You can remove clothing if

you are too warm but there is nothing you can do if you get too cold and do not have warm enough clothing.

2. Log Book: You are required to keep notes and record your observing assignment responses in an observation logbook. The logbook will consist of notes kept in a duotang or other bound book. Again, loose leaf sheets are not acceptable and assignments turned in on loose leaf sheets will not be marked. A hard surface for writing on may also be helpful.

3. Flashlight with freshly changed batteries and covered with a RED filter (nail polish will do) to reduce the brightness. Bring along extra batteries since two hours of continuous use in cold weather can weaken the batteries in your flashlight. Flashlights that are not filtered and/r which are judged by the TAs to be too bright will not be allowed at the observatory (They will ruin your night vision)

4. Star maps and/or planisphere Star charts are provided in the laboratory sessions.

5. Pencils and erasers soft lead pencils, such as 2B, are recommended. Do not bring pens, as if it is too cold, the ink may freeze.